

promoter plasmid), said vector comprising the cassettes:

(a) cassette 1 comprising TET-ON expressed under the control of a heat shock promoter and a tet operator, wherein said TET-ON consists of a fusion of the coding sequences for amino acids 1-207 of [the] tetracycline repressor and the C-terminus last 130 amino acid transcription activation domain of [the] VP16 protein of the herpes simplex virus, wherein said [;

(b) a] heat shock promoter [consisting] consists of heat shock response elements (-260 to 30) of the human heat shock 70 gene promoter^{st?} linked to [the] a minimal cytomegalovirus promoter[,] (pCMV)[;

(c) a] and wherein said tet operator [consisting] consists of [the] 19 bp inverted repeats of [the] operator O2 of TN10 to which [the] tet repressor and [TAKON] TET-ON bind; [and]

(b) cassette 2 comprising a cloning site for a therapeutic gene downstream of a tetp-CMV promoter consisting of a tet operator linked to a minimal cytomegalovirus promoter (pCMV), wherein said tet operator consists of 19 bp inverted repeats of operator O2 of TN10 to which tet repressor and TET-ON bind;

~~[(d)] (c) cassette 3 comprising antisense TET-ON under the control of pCMV promoter, wherein said antisense TET-ON consists of an antisense sequence [consisting of the] complementary sequence to the first 80 [bases of the TAKON] nucleotides of the TET-ON sequence including the ATG start codon[.]; and,~~

~~(d) cassette 4 comprising a dominant negative TET-ON under the control of pCMV promoter, wherein said dominant negative TET-ON consists of tet repressor without a VP16 transactivation domain.~~

Please amend claim 2 as follows:

2. (amended) A method of achieving localized, temporal [sustained] expression of a gene under control of a heat [or light] inducible promoter, comprising the step of:

~~inserting said gene into the cloning site of the pDATH-X vector of claim 1;~~

introducing the vector containing said gene into the host organism; and

applying heat [or light] energy to a location on said host organism where expression of said gene is desired.